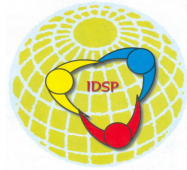


**National Rural  
Health Mission  
(NRHM)**



**Directorate of Health & Family Welfare  
Government of Punjab  
*Integrated Disease Surveillance Project (IDSP)*  
Parivar Kalyan Bhawan, Sector-34A, Chandigarh.  
Phone No: 0172-2621506**

The point wise detail of activities under IDSP is as follows:-

**1. Programme – when started? Objectives of IDSP? Any other information? Any plans of State/ Central govt. about this project?**

Integrated Disease Surveillance Project (IDSP) was launched by Hon'ble Union Minister of Health & Family Welfare in November 2004. It is a decentralized, State based Surveillance Program in the country. The project design was based on the experience of implementation of a WHO supported National Surveillance Project for Communicable Diseases (1998-2003). The state of Punjab has piloted disease surveillance program under the State Health Project supported by the World Bank whereas the State was included in the Phase III of the project in 2007 and by now has experience of 2 years only in implementation. As per the guidelines provided by Govt. of India, IDSP is being implemented in all districts of state which was formally launched on 12<sup>th</sup> June, 2007 by Hon'ble Prof. Laxmi Kanta Chawla , Health & Family Welfare Minister, at Bhawani Garh, Distt. Sangrur. The State has designated Surveillance Units in all 20 districts. All the districts are reporting surveillance data on weekly basis as well as all the outbreaks, whenever they occur.

It is intended to detect early warning signals of impending outbreaks and help initiate an effective response in a timely manner:

- Major components of the project are :
  - Integration and decentralization of surveillance activities
  - Strengthening of public health laboratories

- Human Resource Development – Training of State Surveillance Officers, District Surveillance Officers, Rapid Response Team, other medical and paramedical staff as Pharmacists and health workers.
- Use of Information Technology for collection, collation, compilation, analysis and dissemination of data.
- For Project implementation, Surveillance Units have been set up at State and District level.
- Surveillance Committees at National, State and District levels are monitoring the Project.
- Linkages have been established with all State Head Quarters, District Head Quarters and all Government Medical Colleges on a Satellite Broadband Hybrid Network. This network enables enhanced Speedy Data Transfer, Video Conferencing, Discussions, Training, Communication and in future e-learning for outbreaks and program monitoring under IDSP.
- A 24X7 call center with telephone no 0172-2603276 is in operation This receives disease alerts from anywhere in the state and diverges the information to the respective District Surveillance Units for verification and initiating appropriate actions wherever required.
- Under IDSP data is collected on a weekly (Monday–Sunday) basis. The information is collected on three specified reporting formats, namely “S” (suspected cases), “P” (presumptive cases) and “L” (Laboratory confirmed cases) filled by Health Workers, Clinician and Clinical Laboratory staff. The weekly data gives the time trends. Whenever there is a rising trend of illnesses in any area, it is investigated by the Medical Officers/Rapid Response Teams (RRT) to diagnose and control the outbreak.

➤ **Original objectives and scope:**

This project originally sought to improve :

- Reporting on a limited set of diseases and syndromes

- Strengthening laboratory capacity to diagnose these priority diseases
- Recording and transmission of the information through effective use of IT networks
- Enhancing the ability of health system to detect outbreaks, promptly investigate and control them.

This initiative was to accomplish the goals by enabling the states to improve the completeness, reliability, and timeliness of information collected at the peripheral levels of the health care system, engage the large private health care sector in disease reporting, conduct training of surveillance personnel, equipment and staff public health laboratories, and improve capacity of Rapid Response Teams.

### **Diseases conditions under the surveillance program**

(i) ***Regular Surveillance:***

- |   |      |  |
|---|------|--|
| Vector Borne Disease  | : 1. | Malaria  |
| Water Borne Disease   | : 2. | Acute Diarrhoeal Disease (Cholera)   |
|   | : 3. | Typhoid  |
| Respiratory Diseases  | : 4. | Tuberculosis   |
| Vaccine Preventable Diseases                                    | : 5. | Measles  |
| Diseases under eradication                                      | : 6. | Polio  |
| Other Conditions  | : 7. | Road Traffic Accidents<br>(Linkup with police computers)                                       |
| Other International commitments:                                | : 8. | Plague   |
| Unusual clinical syndromes<br>(Causing death / hospitalization) | : 9. | Menigoencephalitis/Respiratory<br>Distress Hemorrhagic fevers, other<br>undiagnosed conditions |

(ii) ***Sentinel Surveillance***

- |   |      |  |
|---|------|--|
| Sexually transmitted diseases/Blood borne | : 10 | HIV/HBV, HCV                                 |
| Other Conditions                          | : 11 | Water Quality                                |
|   | : 12 | Outdoor Air Quality<br>(Large Urban centers) |

(iii) ***Regular periodic surveys:***

- |                  |      |  |
|------------------|------|--|
| NCD Risk Factors | : 13 | Anthropometry, Physical<br>activity, Blood Pressure, |
|------------------|------|--|

Tobacco, Nutrition,  
Blindness

- (iv) ***Additional State Priorities*** : Each state may identify up to five additional conditions for surveillance.

In the surveillance challenges, the project was to accomplish its goals through:

- Reporting a small list of priority conditions that include:
  - (a) Syndromes at community and sub center level
  - (b) Provisionally diagnosed conditions at the out patients and inpatients care facilities.
  - (c) Laboratory confirmed conditions identified by simple laboratory tests.  
This information is to be collected from both public and private sectors.
- Enhancing the abilities to compile and analyze the surveillance information through computerization and electronic data transmission using video conferencing links for effective communication and training.
- Integrating all existing disease surveillance activities.

## **2. Present state of project in Punjab as a whole, Distt. wise and block wise.**

Presently IDSP is in operation in all Distts. of Punjab. The District Surveillance units are operational in all 20 Distt. The structure of the DSU is as follows:

- District Health Officer/ Distt. Surveillance Officer
- Epidemiologist
- Data Manager
- Data Entry Operator
- Accountant
- Administrative Assistant

➤ The activities undertaken at state level are :

- Compilation of weekly reporting from all 20 Distt. and sending it to Central Surveillance Unit.

- Sending IDSP Alert from State Surveillance Unit to all Distt. Surveillance units after analysis of weekly reports.
  - Sending Outbreak report to Central Surveillance Unit
- The activities undertaken at Distt. level are :
- Collecting weekly surveillance reports on S, P, L forms from various reporting units like CHC, PHC coming under the distt.
  - To impart training to all health workers under IDSP for accurate and timely reporting.
  - To investigate and contain outbreak as soon as reported.
- The activities undertaken at block level are :
- Collection of data from reporting units ex ; subsidiary health centre, sub centre etc.
  - Dissemination of information received from Distt. surveillance unit to health workers.

**3. Financial and Physical targets? Some achievements of last few years under financial / physical aspects?**

Integrated Disease Surveillance Project is being implemented under State Health Society. Funds amounting to Rs. 164.00 lacs were released by the Central Government during the year 2006-07. An amount of Rs. 30 lacs had been released by the Central Government for the year 2008-09. The project is being administered by Project Co-ordinator-cum- State Nodal Officer-IDSP. (Financial and Physical targets, copy attached)

**4. Action point – Which are the points which need action? Persons responsible for them? Any target dates?**

The points that need action are:

- Any epidemic or outbreak .
  - Routine weekly surveillance.
  - Data collection and analysis.
  - Any other occurrence of unusual event related to health sector.
- Persons responsible for these and their duties are:
- Epidemiologist

- Data Manager
- Data entry operator
- Accountant
- Administrative assistant

### **Duties and responsibility of the staff under IDSP:-**

#### **1. Epidemiologists:-**

- Organize and monitor timely collection of data from all Reporting Units. Administer collection, compilation and analysis of passive surveillance data not only from peripheral health institutions but also from hospitals and colleges in the district.
- Analyse surveillance data and prepare weekly surveillance graphs and charts
- Identify outbreaks of diseases targeted in IDSP for all reporting units using triggers agreed with State and Central Surveillance Unit.
- Prepare and send monthly summaries of the disease situation to the State Surveillance Unit and Regional Project Coordinators.
- Initiate outbreak investigations promptly following the standard operating guidelines of IDSP.
- Coordinate movement of Rapid Response Team & participate in all outbreak investigations.
- Ensure timely submission of FIR (First Information Report) and detailed Outbreak Report to SSU and Regional Project Coordinators.
- Prepare and timely submit annual project report and annual surveillance report for the DSU to SSU and Regional Project Coordinators.
- Support effective operational integration of disease control efforts based on the surveillance data.
- Coordinate involvement of Medical Colleges, Private Sector, Community and Media in surveillance activities
- Provide regular feedback to all reporting units on disease trends and outbreaks
- Organize, coordinate & monitor training of district staff under IDSP.
- Identify emerging training needs at the district and revise training calendars accordingly.
- Organize dissemination of training manuals and materials for training courses.
- Assist in organizing independent evaluation studies under IDSP and its outcome

- Supervise Data Entry Operators and Accountants appointed under IDSP to ensure timely submission of quality information required in relation to data and finance / procurement matters
- Monitor proper use of EDUSAT facility/IT networking towards data transfer, training, e-conferencing.
- Coordinate regular meetings of District Surveillance Committee and assist in inter-sectoral coordination for effective IDSP implementation.
- Organize regular meetings of IDSP stakeholders.
- Make supervisory visits to reporting units to monitor implementation of project activity.
- Support district surveillance officers in carrying out other works related to effective implementation of IDSP

**2. Data Manager**

- Supervise Functioning of MIS unit of Integrated Disease Surveillance Project
- Supervise functioning of Data Entry Operators
- Organize information received from District Surveillance Units
- Preparation of Reports required under the Project.
- Organize maintenance of IT Hardware, software and WAN.

**3. Data Entry Operators**

- To assist State Surveillance Officer and other officials in carrying out above mentioned activities.

**4. Administrative Assistant**

- To assist State Surveillance Officer and other officials in carrying out above mentioned activities.

**5. Consultant Finance**

- Periodic release of funds to District Societies.
- Monitor expenditure incurred by the Districts under IDSP.
- Budgeting by components and Districts.
- Obtain and review of audited accounts, SOEs and Utilization Certificates.
- Submitting documents to the Centre for facilitating disbursements from the Bank.
- Organizing audit for State/District level expenditure.
- Organizing training of District level Accountants.

**6. Consultant Training/Technical**

In Punjab State Consultant Training/Technical is working as State Nodal Officer and is responsible for the overall management of the project. The duties and responsibilities also include

- Identifying institutions for training of various categories of personnel, based on selection criteria.
- Collate and review training plans for all districts in the State.
- Organize dissemination of training manuals and materials for training courses.
- Monitor training activities at the State level and in the Districts.
- Monitor expenditure incurred on training and related activities.
- Assist in organizing independent evaluation of training and its outcome.

## **5. Main limitations in the implementation of the programme?**

### **Limitations of the IDSP design:**

The IDSP design was based on certain assumptions of capacity, the lack of which constrained the designing. These included assumptions that-

- There is adequate epidemiological capacity available at state and district levels to design and implement the disease surveillance program effectively.. Consequently the project only provided additional staff for data entry, management and administrative support. At State level, additional consultants in the areas of finance and training have been provided.
- The existing Public Health Labs have adequate trained human resources (microbiologists) and will be able to take the additional load of disease surveillance with inputs like civil works and equipment.
- Surveillance Information can be obtained from the Public Hospitals and private sector with some sensitization and same standard forms could be used.

## **Successes and Challenges for IDSP in Punjab**

### **A. Successes:**

- **Strong political and bureaucratic support at the highest level for improved disease surveillance as a component of the NRHM:** Regular

monitoring by the Principal Secretary Health and Mission Director NRHM on Project implementation and surveillance data particularly in relation to disease outbreaks. Review by Mission Director on fortnightly basis and a major component of monthly conference of Civil Surgeons chaired by Hon'ble Health Minister and conducted by Principal Secretary Health.

- Full time *State Surveillance Officer* for IDSP.
- Designating *District Surveillance Officers* in all districts and *District Epidemiologists* from State Cadre in 10 districts and capacity building by trainings and frequent orientation workshops to these officials.
- Data analysis and feed back through *Weekly IDSP Alert at State Level* (sent to CSU, PSHFW,MD NRHM, all RUs) and now even at distt. Level in Amritsar, Mohali, Ferozepur, NawanShahar, Ludhiana, Kapurthala, SAS Nagar & Tarn Taran through monthly IDSP newsletter, circulated to all stake holders .
- Full staffing of Data Managers at State and Distts and 90% of remaining various posts.
- 24X7 Control Rooms at State and District HQs have been established.
- **FETP training for DSOs:** All the DHOs designated as DSOs have already under undergone 2 weeks FETP training at BJ Medical College Pune. This has significantly improved the ability of the DSOs to undertake disease surveillance.
- **Data Analysis and Feedback:** The State Surveillance Unit is preparing a weekly surveillance report in form of IDSP Alert with focus on outbreaks and its mapping and distributed to all the stake holders Govt. as well as Private and in all the distts.
- **Outbreak investigations:** The State had reported 21 outbreaks in 2008, and most of them confirmed by appropriate laboratory tests. The list of outbreaks occurred during 2008 and 2009 is attached.
- Initiation of media scanning to identify disease prevalence, disease promoting factors and outbreaks, reported by media and followed-up with districts on actions taken.

- Initiation of NCD Cell as a Pilot project in the State with establishment of Distt. NCD Cell at Jalandhar.
- Towards meeting IHR 2005 requirements the State has recruited 9 epidemiologists in different distts as per selection conveyed through CSU. Induction training at the State level conducted.
- Mapping of diseases including Line listing. Also special studies for major outbreaks, like Dengue, got done from PGI. Studies of outbreaks of Cholera done at Mohali and Zirakpur.

## **B. Challenges**

### **State Specific Implementation Issues:**

#### **Management of Disease Surveillance:**

- Inavailability of staff in District Surveillance Unit.
- Frequent turnover of District Surveillance Officers.
- Non-availability of dedicated and trained epidemiologists with medical background at the State and in all the remaining 10 districts with capacity to analyze the IDSP data and mount adequate response. Microbiologist at State H.Q and Entomologist are also not available.
- Most of the critical staff at State level does not have formal training in public health/epidemiology, severely limiting their understanding of disease surveillance.
- Low remuneration for Data Managers, DEOs, Financial Consultant and other consultants resulting into frequent changeovers.
- Operational challenges in building the public health laboratory network is a constraint to the etiological confirmation of most outbreaks reported.
- The Department of Medical Education (DRME) and Deptt. of Health and Family Welfare are different wings; thus resulting into less involvement of teaching hospitals/Medical Colleges in the disease surveillance system.
- Inter sectoral Coordination with other concerned departments like Water Supply and sanitation and local bodies etc. not much result oriented at times.

- Health workers at the periphery level do not have basic facilities like phone lines, net connectivity which results in delayed or no communication.

### **Reporting:**

- The data in P forms (provisional diagnosis) being reported by the primary health centers is mostly syndromic. The new P forms have now been introduced throughout the State. However, it is problematic to get the MOs to write the provisional diagnosis on the OPD slips which does not give the real picture of the reported cases.
- Though the State has signed MoU with all the five Pvt. Medical Colleges in the State, the involvement of these institutions in sending weekly surveillance data and information regarding any early data related to disease outbreak is very limited. The Govt. Medical colleges also are not involved regularly.
- Limited participation of private sector as not much interested to share and communicate the disease data.

### **Outbreak Investigation:**

- Despite improvements in reporting of outbreaks and efforts to obtain lab confirmation, there is still scope for improving the quality of outbreak investigations through sample confirmation of disease through laboratory, inter sect oral coordination in tackling the causative factors and analysis epidemiologically, clinically and lab confirmation.
- Participation of whole RRT including Pediatrician, Microbiologist, Clinician in outbreak investigation needs to be enforced.
- 20% samples for outbreaks to be sent for confirmation of diagnosis.
- Risk assessment as per criteria in outbreaks

### **Analysis and use of data:**

- Mostly limited to District and State levels. Requires more decentralized analysis at PHC level

- Some districts have started entering data on IDSP portal but face problems very often due to non connectivity and server downtime. Distt. Staff needs adequate training on IDSP Portal.
- The monitoring of timeliness, completeness and correctness and follow up with concerned reporting unit is done less frequently by PHC staff.
- The first reporting of the outbreak needs to be immediate followed by outbreak investigation including lab confirmation of the cause. The subsequent cases needs to be included in the weekly surveillance data if the disease reporting continues.